

ORDER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

1380.53C

8/8/96

**SUBJ: STAFFING GUIDE FOR AVIATION SAFETY (CERTIFICATION) ENGINEERS AND
FLIGHT TEST PILOTS**

- 1. PURPOSE.** This order presents the staffing guide developed by the Aircraft Certification Service (AIR) contained in Staffing Guide for Certification Engineers and Flight Test Pilots - Final Report, dated January 1992, covering work performed by non-supervisory engineers and flight test pilots at the Washington headquarters of the Aircraft Certification Service, the Aircraft Certification Directorates, all Aircraft Certification Offices, and the Brussels Aircraft Certification Division. This order establishes the Staffing Guide Review Committee.
- 2. DISTRIBUTION.** This order is distributed to the director level in the Office of Business Information and Consultation, Financial Services, Human Resource Management; the branch level in the Aircraft Certification Service and the Brussels Aircraft Certification Division; the branch level in the Aircraft Certification Directorates; a standard distribution to Aircraft Certification Offices.
- 3. CANCELLATION.** Order 1380.53B, Staffing Guide For Aviation Safety (Certification) Engineers and Flight Test Pilots, dated October 28, 1994, is canceled.
- 4. BACKGROUND.**
 - a.** The Aircraft Certification Service and the Office of Management Systems initiated an effort in 1989 to develop a staffing guide for non-supervisory engineers and flight test pilots working in its Aircraft Certification Offices, Directorate and headquarters divisions. The effort was undertaken to:
 - (1) Document for the first time the full scope of AIR work program requirements.
 - (2) Improve the organization's position in developing and justifying budget request for staffing.
 - (3) Establish a validated set of measures applicable to the work performed by certification engineers and flight test pilots.
 - (4) Comply with FAA policy as stated in Order 1380.34A, FAA Staffing Standards Program, to establish staffing standards following the definition of essential work functions.
 - (5) Meet the requirements of Order 1800.56, Administration of Aviation Standards Activities - Program Guidelines.
 - b.** The order presents the staffing guide developed by the Aircraft Certification Service (AIR) contained in the Staffing Guide for Certification Engineers and Flight Test Pilots - Final Report, dated January 1992, covering work performed by non-supervisory engineers and flight test pilots of the Aircraft Certification Service.

5. EXPLANATION OF CHANGES. Order 1380.53B, Staffing Guide for Aviation Safety (Certification) Engineers and Flight Test Pilots has been revised according to changes prescribed by the Staffing Guide Review Committee. The following revisions have been made:

- a. In appendix 1, page 1, and appendix 2, pages 2 and 12, the time standard for DER Oversight was revised from 2 hours to 6 hours.
- b. In appendix 1, pages 8 and 10, and appendix 2, pages 3 and 13 under Regulatory Policy Development the first 4 items related to AC's was deleted.
- c. In appendix 2, pages 5 and 15, the second sentence was revised to include Advisory Circular projects.
- d. Two new work measures were added, both under Regulatory Policy Development: Briefing Material Prepared (8 hours) and Technical Seminar/Workshops Conducted (105 hours).
- e. All references to first level supervisors were deleted.
- f. The committee membership was amended to five technical Managers, five staffing standards program managers, and one AIR-500 representative. Previously the committee membership consisted of ten managers representing the AIR division, Directorate, and ACO organizational elements.
- g. In appendix 2 pages 9 and 19, second paragraph was revised to provide clarification as follows: (minimum 80 hours for the life of the project).
- h. In appendix 1, page 13, and in appendix 2, page 17, the time standard for PMA design approvals (through test reports and computation issued) was revised from 40 hours to 21 hours.
- i. In appendix 1, page 12, the definition for certification meetings attended was revised to include the Washington headquarters engineers.
- j. In appendix 1, page 13 and page 16, and appendix 2, page 17, a new work measure, TSO Deviations Issued (32 hours), was added for the Washington headquarters only.

6. DEFINITIONS. All definitions required for application for the staffing guide are included in Appendix 1, Staffing Guide for Certification Engineers and Flight Test Pilots.

7. FORMS AND REPORTS.

- a. All AIR divisions, Directorates, and ACO's will submit a Completed Work Products and Staff Hours Report, on a quarterly basis to the Aircraft Certification Service, Planning and Program Management Division (AIR-500). ACO and Directorate staff reports will be submitted through the appropriate Directorate, who will forward a consolidated directorate/division report and all original reports to AIR-500. All reports must be received by AIR-500 no later than 10 working days after the completion of each quarter. A sample of a typical report is included in appendix 2 as Figure 1, Sample Completed Work Products and Staff Hours Report.

b. The Aircraft Certification Directorates, the Washington headquarters Engineering Division, and the Brussels Aircraft Certification staff will submit a Staffing Requirements Report, on an annual basis to the Aircraft Certification Service, Planning and Program Management Division (AIR-500). The directorate offices which includes Central, New England, Northwest Mountain, Southwest, Europe, and AIR-100 have to submit a consolidated report to AIR-500 for review and consolidation into a total Aircraft Certification Service report. All reports must be received by AIR-500 no later than 20 work days after the completion of each fiscal year. A sample of a typical report is included in appendix 2 as Figure 2, Sample Staffing Requirements Report.

8. DESCRIPTION OF STAFFING GUIDELINES. Staffing guides and standards are designed to express the staffing requirements of an organization or function in terms of hours or work years of employee effort. Presented in the form of mathematical models, equations, or compilations of task activity times, staffing guides and standards are based on specific work measures of the activity or output expected of trained, experienced personnel operating at an appropriate pace. Workload figures derived by application of these direct work measures are combined with allowances or factors to account for leave, training, and other overhead activities. The indirect work allowances are shown in figure 3, appendix 2. The resulting figure represents total organizational workload, which is then divided by a standard employee workyear (i.e. 2087 hours) to yield total staffing requirements.

9. SCOPE. The staffing guide is organized around the three major mission areas included in the Aircraft Certification Regulatory Program (ACRP): continued operational safety; regulatory policy development; and certifications, approvals, and appointments. The guide addresses two broad categories of effort, direct and indirect work activities, and includes direct work measures and time standards along with worksheets for reporting staff hours devoted to major, long-term certification and rulemaking projects. An in-depth description of the guide's structure and content is provided in the final report on the staffing guide development project.

10. METHODOLOGY.

a. The methodology employed in developing the staffing guide was structured around two key elements: a phased approach to build and validate each component of the guide, and reliance on the Staffing Guide Review Committee of ACO, Directorate, and headquarters managers to assist in generating required information and providing ongoing quality assessment.

b. The following three information components collectively provided the basis for both the initial design and final composition of the staffing guide:

(1) **Preliminary Data Sources.** The initial design of the staffing guide and much of the basic workload information contained in its draft and final versions were derived from a number of preexisting sources of data concerning AIR and ACRP activities and projects. These sources included:

(a) The AIR Job Task Analysis (JTA), a comprehensive 10 volume inventory of the products generated and the tasks and procedures performed under the ACRP.

(b) Service and workload indicators previously developed to capture and define AIR responsibilities, both in broad as well as specific terms.

(c) Field visits to each of the four Directorate division staffs and a cross section of ACO's to discuss workload definition and time requirement issues.

(d) Current year and historical AIR workload data from the Project Information Control System (PICS), providing actual completion items for various ACRP products and activities.

(2) **Staffing Guide Review Committee Input.** The Staffing Guide Review Committee of 10 managers representing all AIR Divisions, Directorate, and ACO organizational elements played a critical role in all phases of the staffing guide development process. Staffing Guide Review Committee members provided feedback regarding the initial design of the guide, generated additional information and data sources, revised and validated the guide through each project phase, served as project focal point in their respective organizations, and facilitated and coordinated a nationwide field test of the staffing guide.

(3) **Test and Evaluation Activities.** The AIR staffing guide development process included two formal tests: a pilot test of the preliminary version of the guide, and a full field test of a revised version of the guide which reflected both the results of the pilot test and additional modifications made by the Staffing Guide Review Committee.

c. Development of the guide was completed over a two-year period through several phases: preliminary design, final design, initial draft, revised draft, and final version. Additional activities completed prior to the effective date of this order include creation of an automated job aid to assist users of the guide in recording and tracking workload data, and development and delivery of an orientation and training seminar to familiarize ACO, Directorate, and headquarters staff with the guide's purpose and application. An in-depth description of the methodology employed to develop the guide is provided in the final report on the staffing guide development projects.

d. The Staffing Guide Review Committee will continue to function as a standing committee with a mandate to review and revise the staffing guide as necessary to meet new or changing organizational requirements. Paragraph 14 provides a complete description of the standing committee's specific responsibilities in this regard.

11. **APPLICABILITY.** The staffing guide as defined in appendix 1 to this order applies to non-supervisory certification engineers and flight test pilots at the AIR Division, Directorate and ACO levels. Work performed by supervisory certification engineers and flight test pilots, administrative support staff, and technical/clerical personnel is not addressed by this staffing guide.

12. USE OF STAFFING GUIDE.

a. The work measures and time standards included in this order shall be applied to calculate Aircraft Certification Service staffing requirements for use in the formulation and justification of annual budget requests. Staffing requirements will be determined by application of the work measures and time standards both to record completed work for the current year and to project out year workload based on historical trends and anticipated changes in organizational activities (industry driven demand activities). Required staffing levels derived through this procedure will form the basis for total non-supervisory certification engineer and flight test pilot staffing figures included in the agency's budget request to the Office of Secretary of Transportation, the Office of Management and Budget, and the Congress.

b. Workload and staffing levels information developed through use of the staffing guide will also be a basis for Aircraft Certification Service strategic planning, policy development, and human resources management processes. Additional applications of staffing guide information may include employee workload allocation and scheduling, non-personal service budget development (e.g., equipment, office space), and organizational or functional realignments.

c. While required staffing levels derived through application of the staffing guide will provide the basis for formulating agency budget requests for staffing, ultimate approval and authorization of organizational staffing levels will be dependent on determinations made by the Secretary of Transportation, the Office of Management and Budget, and the Congress.

13. RESPONSIBILITIES. This order assigns continuing responsibilities for the application, maintenance, and revision of the Staffing Guide for Certification Engineers and Flight Test Pilots.

a. Aircraft Certification Offices are responsible for:

(1) Establishing internal procedures for collecting and reporting work product and staff hour data at the branch level biweekly, and for aggregating and reporting such data to the ACO level at least monthly.

(2) Submitting Completed Work Product and Staff Hour Reports on a quarterly basis through the appropriate Directorate to AIR-500 for review and consolidation.

(3) Submitting Staffing Requirements Reports on an annual basis through the appropriate Directorate to AIR-500 for review and consolidation.

(4) Developing out year workload projections for inclusion in annual Staffing Requirements Reports based on such things as known future projects, pending regulatory changes or mandates, new programs or customer requirements, or trend analysis of past workload activities using formal statistical methods.

(5) Identifying and reporting to AIR-500 through the appropriate Directorate any problems encountered in applying the staffing guide, or anticipated changes in workload activities with potential impact on the validity or relevance of the guide.

b. Aircraft Certification Directorates are responsible for:

(1) Establishing internal procedures for collecting and reporting work produce and staff hour data at the branch level biweekly, and for aggregating and reporting such data at least monthly.

(2) Establishing Directorate-wide policies, procedures and deadlines for collecting quarterly Completed Work Product and Staff Hour Reports and annual Staffing Requirements Reports from division and ACO's.

(3) Submitting all original Completed Work Product and Staff Hour Reports from ACO's and directorate divisions on a quarterly basis through the appropriate Directorate to AIR-500 for review and consolidation no later than ten working days after completion of each quarter.

(4) Submitting a consolidated staffing requirements report on an annual basis through the appropriate directorate go AIR-500 for review no later than 20 work days after the completion of each fiscal year.

(5) Developing out year workload projections for inclusion in annual Staffing Requirements Reports based on such things as known future projects, pending regulatory changes or mandates, new programs or customer requirements, or trend analysis of past workload activities using formal statistical methods.

(6) Identifying and reporting to AIR-500 through the appropriate Directorate any problems encountered in applying the staffing guide, or anticipated changes in workload activities with potential impact on the validity or relevance of the guide.

c. Aircraft Certification Service Division (AIR-100) and the Brussels Aircraft Certificate Staff (AEU-100). The responsibility of the specified divisions which employ non-supervisory certification engineers and flight test pilots include:

(1) Establishing internal procedures for collecting and reporting work product and staff hour data at the branch level biweekly, and for aggregating and inputting such data at the branch level at least monthly.

(2) Submitting Completed Work Product and Staff Hour Reports on a quarterly basis directly to AIR -500 for review and consolidation.

(3) Submitting a consolidated Staffing Requirements Reports on an annual basis directly to AIR-500 for review and consolidation.

(4) Developing out year workload projections for inclusion in annual Staffing Requirements Reports based on such things as known future projects, pending regulatory changes or mandates, new programs or customer requirements, or trend analysis of past workload activities using formal statistical methods.

(5) Identifying and reporting directly to AIR-500 any problems encountered in applying the staffing guide, or anticipated changes in workload activities with potential impact on the validity or relevance of the guide.

d. Aircraft Certification Service. Within AIR, the responsibilities of the Planning and Program Management Division (AIR-500) include:

(1) Establishing Aircraft Certification Service-wide policies, procedures and deadlines for collecting quarterly Completed Work Product and Staff Hour Reports and annual Staffing Requirements Reports from Directorates and headquarters divisions.

(2) Reviewing and consolidating all Completed Work Product and Staff Hour Reports submitted on a quarterly basis, conducting a quality audit of workload figures and staff hour totals, and conferring as required with reporting managers regarding problems or discrepancies identified.

(3) Reviewing and consolidating all Staffing Requirements Reports submitted on an annual basis, conducting a quality audit of workload figures, staff hour totals, and out year projections, and conferring as required with reporting managers regarding problems or discrepancies identified.

(4) Calculating total current and out year Aircraft Certification Service staffing requirements for non-supervisory certification engineers and flight test pilots based on aggregation of annual Staffing Requirements Reports submitted by ACO's, Directorate and headquarters divisions. Aggregation to be completed within 60 calendar days after end of the fiscal year.

(5) Preparing and submitting organizational staffing requests to the Office of Financial Services based on workforce requirements identified through application of the guide.

(6) Facilitating and coordinating the activities of the Staffing Guide Review Committee, including evaluation of proposed or anticipated changes in policy, procedures, or organization which may affect the validity of the guide and identifying the need for review committee evaluation and consideration of such changes or related issues.

(7) Evaluating, in conjunction with the Office of Business Information and Consultation, the continuing validity of the guide as indicated by requests for deviations from the guide and by comparison of on-board and authorized strength and staffing levels calculated by application of the guide.

(8) Defining, in conjunction with the Office of Business Information and Consultation, the need for refinement and validation studies to maintain and improve the integrity of the guide.

(9) Participating with the Office of Business Information and Consultation in establishing methods, schedules, and conducting studies to refine and/or validate the staffing guide.

e. Office of Business Information and Consultation is responsible for:

(1) Evaluating, in conjunction with the Aircraft Certification Service, the continuing validity of the guide as indicated by requests for deviations from the guide and by comparison of on-board and authorized strength and staffing levels calculated by application of the guide.

(2) Evaluating, in conjunction with the Aircraft Certification Service, the impact on the staffing guide of changes in policy, procedures, equipment, or organization, which may affect the validity of the guide.

(3) Defining, in conjunction with the Aircraft Certification Service, the need for refinement and validation studies to maintain and improve the integrity of the guide.

(4) Participating with the Aircraft Certification Service in establishing methods, schedules, and conducting studies to refine and/or validate the staffing goals.

(5) Assisting the Aircraft Certification Service as required in the collection of accurate workload information and the ongoing application of the staffing guide.

f. The Office of Financial Services is responsible for ensuring that the staffing guide is integrated with, and used in, the budget process and for participating in the coordination of proposed modifications resulting from studies to refine and/or validate the staffing guide.

g. The Office of Human Resource Management is responsible for participating in the review and coordination of proposed modifications to the staffing guide when the proposed revision has a major impact on personnel programs.

14. STAFFING GUIDE REVIEW COMMITTEE.

a. The Staffing Guide Review Committee consists of five technical managers, five staffing standards program managers, and one AIR-500 representative representing the ACO's, Directorate and headquarters division organizational elements which is responsible for:

(1) Convening annually for the first three years following initial implementation of the staffing guide, and at least biannually thereafter, for the purpose of:

(a) Reviewing workload reporting and guide application results for the prior year(s) to assess organizational impacts and identify issues.

(b) Adding new work measures to the staffing guide as required, based on new programs, new customers, updated training requirements, or rulemaking mandates.

(c) Revising or redefining existing work measures and time standards as dictated by changes in customer requirements; technology, or the AIR organization.


(d) Eliminating or combining seldom used or limited impact work measures, in the interest of continually simplifying and consolidating the guide.

(2) Assisting AIR-500 on continuing basis in the assessment and resolution of specific workload reporting and guide application problems or issues arising in individual committee members' organizational areas of responsibility.

(3) Providing orientation, training, and ongoing guidance and assistance to current and new managers in the application of the staffing guide.

(4) Convening on an "as needed" basis in addition to regularly scheduled meetings to consider major issues, changes, or special circumstances or occurrences with potential for significant impact on the staffing guide, as determined by AIR-500.

15. AUTHORITY TO CHANGE THIS ORDER. Changes to appendices to this order will be approved in accordance with the provisions of Order 1380.34A, Staffing Standards Program. Changes to this order may be issued by authority of the Director of Business Information and Consultation following appropriate coordination and review.


Edwin A. Verburg
Associate Administrator for
Administration

STAFFING GUIDE FOR ENGINEERS AND FLIGHT TEST PILOTS

A. CONTINUED OPERATIONAL SAFETY

WORK MEASURES	Work Measure Applies To ...			Time Standard (hours)
	ACO	DIR	HQ	
SERVICE DIFFICULTIES				
NPRMS for ADs prepared	.	.		32
Final Rule ADs prepared	.	.		32
Emergency ADs prepared	.	.		16
Exemptions to AD prepared	.	.		24
NPRMs for ADs reviewed		.		8
Final rules for ADs reviewed		.		8
Emergency ADs reviewed		.		4
Exemptions to ADs reviewed		.		4
Alternate means of compliance with AD approved	.	.		8
Field investigations of aircraft accidents or serious incidents conducted	.	.	.	40
Corrective actions on service difficulties completed (non-AD)	.	.		40
Responses to NTSB recommendations prepared	.	.	.	60
Responses to NTSB recommendations reviewed		.	.	16
Responses to accident prevention recommendations prepared	.	.	.	24
Responses to accident prevention recommendations reviewed		.		8
Responses to FCAA service difficulty inquired prepared	.	.		24
SURVEILLANCE				
Repair station audits supported	.			80
NASIP inspections supported	.	.		120
Aging fleet inspections conducted	.	.		24
SUPERVISION AND RENEWAL				
DERs supervised	.			6
Aircraft Certification System Evaluation Program (ACSEP) evaluations conducted	.	.	.	Cat 1 - 32 Cat 2 - 60 Cat 3 - 100

STAFFING GUIDE FOR ENGINEERS AND FLIGHT TEST PILOTS

A. CONTINUED OPERATIONAL SAFETY

WORK MEASURES	Work Measure Applies To ...			Time Standard (hours)
	ACE	DIR	HQ	
OTHER ACTIVITIES				
SCRs or CDRs completed	•	•		120
MEOT investigations completed	•	•		40
Technical evaluations of FOIA requests completed	•	•	•	8
Responses to public inquiries completed	•	•	•	16
Responses to Congressional inquiries completed	•	•	•	32
Responses to FCAA certification inquiries (on exported products) prepared	•	•		16
Compliance determinations for foreign civil airworthiness authorities completed	•			40
Canadian STA applications processed	•			16

A. CONTINUED OPERATIONAL SAFETY**2. DEFINITIONS OF WORK MEASURES****Service Difficulties**

NPRMs for ADs prepared - Count the number of NPRMs for airworthiness directives that originated in your office and were prepared during the fiscal year.

Indicator of completed work: publication of the NPRM in the Federal Register.

Final rule ADs prepared - Count the number of final rules on airworthiness directives that originated in your office and were prepared during the fiscal year.

Indicator of completed work: publication of the final rule AD in the Federal Register.

Emergency ADs prepared - Count the number of emergency airworthiness directives (telegraphic or priority letter) that originated in your office and were prepared during the fiscal year.

Indicator of completed work: the issuance of a telegraphic AD or priority letter AD.

Exemptions to AD prepared - Count the number of exemptions to an airworthiness directive that originated in your office and were prepared during the fiscal year.

Indicator of completed work: approval or denial of a petition for exemption.

NPRMs for ADs reviewed - Count the number of NPRMs for airworthiness directives that were reviewed during the fiscal year.

Indicator of completed work: publication of the NPRM in the Federal Register.

Final rule ADs reviewed - Count the number of final rule airworthiness directives that were reviewed during the fiscal year.

Indicator of completed work: publication of the final rule in the Federal Register.

A. CONTINUED OPERATIONAL SAFETY

2. DEFINITIONS OF WORK MEASURES

Service Difficulties (continued)

Emergency ADs reviewed - Count the number of emergency airworthiness directives (telegraphic or priority letter) that were reviewed during the fiscal year.

Indicator of completed work: the issuance of a telegraphic AD or priority letter AD.

Exemptions to ADs reviewed - Count the number of exemptions to an airworthiness directive that were reviewed during the fiscal year.

Indicator of completed work: approval or denial of a petition for exemption.

Alternate means of compliance with AD approved - Count the number of alternate means of compliance with an airworthiness directive that were prepared in your office (including adjustments to compliance times) and were approved or denied during the fiscal year.

Indicator of completed work: approval or denial of the alternate means of compliance.

Field investigations of aircraft accidents or serious incidents conducted - Count the number of field investigations associated with accidents/incidents that were conducted during the fiscal year (each individual participating counts as one item).

Indicator of completed work: final documentation from the work group's investigation.

Corrective actions on service difficulties completed (non-AD) - Count the number of corrective actions originating in your office on reported service difficulties that were completed during the fiscal year.

Indicator of completed work: the issuance of a GENOT, airworthiness alert or other FAA action that is not an AD.

Responses to NTSB recommendations prepared - Count the number of responses to NTSB recommendations that were prepared during the fiscal year.

Indicator of completed work: the forwarding of the proposed final response to AAI (FAA Headquarters).

A. CONTINUED OPERATIONAL SAFETY**2. DEFINITIONS OF WORK MEASURES****Service Difficulties (continued)**

Responses to NTSB recommendations reviewed - Count the number of responses to NTSB recommendations that were reviewed during the fiscal year.

Indicator of completed work: the issuance of the proposed final response to AAI (FAA Headquarters).

Responses to accident prevention recommendations prepared - Count the number of responses to accident prevention recommendations from the Flight Standards Service that were prepared during the fiscal year.

Indicator of completed work: the issuance of the final response.

Responses to accident prevention recommendations reviewed - Count the number of responses to accident prevention recommendations from the Flight Standards Service that were reviewed during the fiscal year.

Indicator of completed work: the issuance of the final response.

Responses to FCAA service difficulty inquiries prepared - Count the number of responses to FCAA service difficulty inquiries that were prepared during the fiscal year.

Indicator of completed work: the issuance of a response.

Surveillance

Repair station audits supported - Count the number of repair station audits that were supported by your office during the fiscal year (each individual participating counts as one item).

Indicator of completed work: the documentation of audit results.

NASIP inspections supported - Count the number of NASIP inspections that were supported by your office during the fiscal year (each individual participating counts as one item).

Indicator of completed work: the documentation of inspection results.

A. CONTINUED OPERATIONAL SAFETY

2. DEFINITIONS OF WORK MEASURES

Surveillance (continued)

Aging fleet inspections conducted - Count the number of inspections on aging aircraft that were conducted during the fiscal year (each individual participating counts as one item).

Indicator of completed work: the documentation of inspection results.

Supervision and Renewal

DERs supervised - Count the number of DERs that were supervised during the fiscal year (e.g., counseling, conferences, reissuing certificates).

Indicator of completed work: issuance of a DER renewal.

Aircraft Certification System Evaluation Program (ACSEP) evaluations conducted - Count the number of ACSEP evaluations of certificate holders and authorized facilities conducted during the fiscal year (each individual participating counts as one item).

Indicator of completed work: Completion of ACSEP report.

- n Category 1 - Completion time of 1 to 40 hours
- n Category 2 - Completion time of 41 to 80 hours
- n Category 3 - Completion time of 81 to 150 hours

Other Activities

SCRs or CDRs completed - Count the number of special certification or certificate design reviews that were completed during the fiscal year (each individual participating counts as one item).

Indicator of completed work: a report on the results of the SCR or CDR.

MEOT investigations completed - Count the number of multiple expert opinion team investigations that were completed during the fiscal year (each individual participating counts as one item).

Indicator of completed work: a report on the results of the MEOT.

A. CONTINUED OPERATIONAL SAFETY**2. DEFINITIONS OF WORK MEASURES****Other Activities (continued)**

Technical evaluations of FOIA requests completed - Count the number of responses to FOIA requests requiring a technical evaluation that were completed during the fiscal year.

Indicator of completed work: the number of responses that require a technical evaluation.

Responses to public inquiries completed - Count the number of formal written responses to public inquiries that were completed during the fiscal year.

Indicator of completed work: the issuance of a formal written response.

Responses to Congressional inquiries completed - Count the number of responses to Congressional inquiries that were completed during the fiscal year.

Indicator of completed work: the issuance of a response.

Responses to FCAA certification inquiries (on exported products) prepared - Count the number of responses to FCAA certification inquiries that were prepared during the fiscal year.

Indicator of completed work: the issuance of a response.

Compliance determinations for foreign civil airworthiness authorities completed - Count the number of compliance determinations for a foreign civil airworthiness authority that were completed during the fiscal year.

Indicator of completed work: the documentation of the finding.

Canadian STA applications processed - Count the number of Canadian Supplemental Type Approval (STA) applications processed on behalf of U.S. applicants during the fiscal year.

Indicator of completed work: STA application forwarded to Canadian airworthiness authority.

STAFFING GUIDE FOR ENGINEERS AND FLIGHT TEST PILOTS

B. REGULATORY POLICY DEVELOPMENT

WORK MEASURES	Work Measure Applies To ...			Time Standard (hours)
	ACO	DIR	HQ	
REGULATIONS DEVELOPMENT				
Special conditions within NPRMs prepared	•	•		70
Special conditions within final rules prepared	•	•		50
Special conditions within NPRMS reviewed		•		20
Special conditions within final rules reviewed		•		10
Exemptions granted or denied		•	•	55
Petitions for rulemaking evaluated		•	•	40
TSOs				
TSOs developed or revised			•	240
POLICY DEVELOPMENT				
New orders issued		•	•	215
Revised orders issued		•	•	145
Notices issued		•	•	90
STANDARDIZATION				
Procedural/technical guidance letters issued		•	•	32
FAR-JAR standardization meetings attended		•	•	120
International regulatory proposals evaluated		•	•	80
Bilateral negotiations concluded			•	120
Bilateral agreements prepared			•	32
Aircraft certification standardization workshops attended	•	•	•	32
Technical Seminar/Workshops Conducted	•	•	•	105
Interdirectorate meetings (for standardization purposes) attended		•	•	12
Issue papers (certification projects) coordinated		•		16
Briefing material prepared			•	8
Responses to certification program notices (CPNs) completed		•		4
Certification program plans (CPPs) coordinated		•		24
Certification meetings attended		•	•	40
FCAA certification guidance meetings attended			•	80

B. REGULATORY POLICY DEVELOPMENT**2. DEFINITIONS OF WORK MEASURES****Regulations Development**

Special conditions within NPRMs prepared - Count the number of special conditions within NPRMs that were prepared during the fiscal year.

Indicator of completed work: publication of special condition in the Federal Register.

Special conditions within final rules prepared - Count the number of special conditions within final rules that were prepared during the fiscal year.

Indicator of completed work: publication of special condition in the Federal Register.

Special conditions within NPRMs reviewed - Count the number of special conditions within NPRMs that were reviewed during the fiscal year.

Indicator of completed work: publication of special condition in the Federal Register.

Special conditions within final rules reviewed - Count the number of special conditions within final rules that were reviewed during the fiscal year.

Indicator of completed work: publication of special condition in the Federal Register.

Exemptions granted or denied - Count the number of exemptions to a FAR that were granted or denied during the fiscal year.

Indicator of completed work: a grant or denial of an exemption.

Petitions for rulemaking evaluated - Count the number of petitions for rulemaking that were evaluated during the fiscal year.

Indicator of completed work: a denial of the petition or establishment of a rulemaking project.

TSOs

TSOs developed or revised - Count the number of TSOs that were developed or revised during the fiscal year.

Indicator of completed work: the issuance of a final TSO.

B. REGULATORY POLICY DEVELOPMENT

2. DEFINITIONS OF WORK MEASURES

Policy Development

New orders issued - Count the number of new FAA orders that were developed during the fiscal year.

Indicator of completed work: the issuance of a final order.

Revised orders issued - Count the number of revised FAA orders that were developed during the fiscal year.

Indicator of completed work: the issuance of a final revision to an order.

Notices issued - Count the number of notices that were developed during the fiscal year.

Indicator of completed work: the issuance of a final notice.

Standardization

Procedural/technical guidance letters issued - Count the number of procedural/technical guidance letters that were issued during the fiscal year.

Indicator of completed work: the issuance of a letter.

FAR-JAR harmonization meetings attended - Count the number of FAR-JAR harmonization meetings that were attended during the fiscal year (each individual participating counts as one item).

Indicator of completed work: the documentation of meeting results.

International regulatory proposals evaluated - Count the number of regulatory proposals from international airworthiness authorities that were evaluated during the fiscal year.

Indicator of completed work: a written response to the airworthiness authority.

Bilateral negotiations concluded - Count the number of bilateral negotiations that were concluded during the fiscal year.

Indicator of completed work: a final report on the results of the negotiation.

B. REGULATORY POLICY DEVELOPMENT**2. DEFINITIONS OF WORK MEASURES****Standardization (continued)**

Bilateral agreements prepared - Count the number of bilateral agreements that were prepared during the fiscal year.

Indicator of completed work: Headquarter's forwarding the proposed agreement to the Department of State.

Aircraft certification standardization workshops attended - Count the number of standardization workshops staff member(s) attended during the fiscal year (each individual participating counts as one item).

Indicator of completed work: A report of meeting results.

Technical seminar/workshops conducted - Count the number of seminars and workshops that were conducted during the fiscal year. Conducting a workshop includes performance of activities such as preparing agenda, taking minutes, writing evaluations and general coordination.

Indicator of completed work: Copy of seminar/workshop agenda signed, dated and annotated that the seminar/workshop was completed.

Interdirectorate meetings (to standardize interpretation of FAR) attended - Count the number of Interdirectorate meetings that were attended during the fiscal year for purposes of standardization (each individual participating counts as one item).

Indicator of completed work: documentation of meeting results.

B. REGULATORY POLICY DEVELOPMENT

2. DEFINITIONS OF WORK MEASURES

Standardization (continued)

Issue papers (certification projects) coordinated - Count the number of issue papers pertaining to certification projects that were coordinated by Directorate Project Officers during the fiscal year.

Indicator of completed work: directorate approval of issue papers.

Briefing material prepared - Count the number of policy briefing papers, executive summaries, status papers, information papers prepared for AIR-1/2 or above, or for other services, i.e., Flight Standards, R&D Systems Engineering, Chief Counsel and Airway Facilities during the fiscal year.

Indicator of completed work: The number of papers prepared that were not associated with an active project captured elsewhere in the staffing standards during the fiscal year.

Responses to certification program notices (CPNs) completed - Count the number of CPNs that were responded to by Directorate Project Officers during the fiscal year.

Indicator of completed work: a final response to ACO.

Certification program plans (CPPs) coordinated - Count the number of CPPs that were coordinated by Directorate Project Officers during the fiscal year.

Indicator of completed work: directorate approval of the certification program plan.

Certification meetings attended - Count the number of certification meetings that were attended by Directorate Project Team or HQ's engineers during the fiscal year (each individual participating counts as one item).

Indicator of completed work: documentation of meeting results.

FCAA certification guidance meetings attended - Count the number of meetings attended during the fiscal year to provide certification guidance to FCAAs on interpretation/application of FARs and associated guidance material (each individual participating counts as one item).

Indicator of completed work: documentation of meeting results.

STAFFING GUIDE FOR ENGINEERS AND FLIGHT TEST PILOTS

C. CERTIFICATIONS, APPROVALS, APPOINTMENTS

WORK MEASURES	Work Measure Applies To ...			Time Standard (hours)
	ACO	DIR	HQ	
DESIGN APPROVALS (IMPORT AND DOMESTIC)				Cat 1 - 32 Cat 2 - 95 Cat 3 - 315
New Type Certificates issued	•	•		
Amended Type Certificates issued	•	•		Cat 1 - 24 Cat 2 - 85 Cat 3 - 300
Supplemental Type Certificates issued	•			Cat 1 - 24 Cat 2 - 85 Cat 3 - 265
Amended Supplemental Type Certificates issued	•			Cat 1 - 24 Cat 2 - 75 Cat 3 - 220
Design Changes issued	•			Cat 1A - 4 Cat 1B - 24 Cat 2 - 90 Cat 3 - 275
Field approvals (FAA Form 337), flight tests conducted	•			4
Field approvals (FAA Form 337), engineering design reviews completed	•			16
Field approvals (FAA Form 337), AFM supplements approved	•			4
TSO authorizations (domestic) issued	•			4
TSO design approvals (import appliance) issued	•			8
TSO deviations issued			•	32
PMA design approvals (through identity) issued on denied	•			8
PMA design approvals (through test reports and computation issued)	•			21
Working procedures negotiated	•	•	•	40
APPOINTMENT OF REPRESENTATIVES OF THE ADMINISTRATOR				
New DERs appointed or revoked	•			12
New delegations (DOA, DAS) appointed	•			120
New SFAR 36 delegations issued	•			80

C. CERTIFICATIONS, APPROVALS, APPOINTMENTS

Design Approvals (Import and Domestic)

New Type Certificates issued - Count the number of new TCs issued during the fiscal year for which your branch was assigned principal responsibility.

Indicator of completed work: issuance of a type certificate.

- Category 1 - Project completion time of 1 to 40 hours
- Category 2 - Project completion time of 41 to 120 hours
- Category 3 - Project completion time of 121 to 600 hours

Amended Type Certificates issued - Count the number of Amended TCs issued during the fiscal year for which your branch was assigned principal responsibility.

Indicator of completed work: amendment to the type certificate.

- Category 1 - Project completion time of 1 to 40 hours
- Category 2 - Project completion time of 41 to 120 hours
- Category 3 - Project completion time of 121 to 600 hours

Supplemental Type Certificates issued - Count the number of Supplemental TCs issued during the fiscal year for which your branch was assigned principal responsibility.

Indicator of completed work: issuance of a supplemental type certificate.

- Category 1 - Project completion time of 1 to 40 hours
- Category 2 - Project completion time of 41 to 120 hours
- Category 3 - Project completion time of 121 to 600 hours

Amended Supplemental Type Certificates issued - Count the number of Amended STCs issued during the fiscal year for which your branch was assigned principal responsibility.

Indicator of completed work: amendment to an STC.

- Category 1 - Project completion time of 1 to 40 hours
- Category 2 - Project completion time of 41 to 120 hours
- Category 3 - Project completion time of 121 to 600 hours

C. CERTIFICATIONS, APPROVALS, APPOINTMENTS**Design Approvals (Import and Domestic) (continued)**

Design Changes issued - Count the number of TDCs (including approval of repairs, propeller vibration approvals, and PMA follow-on design changes) and follow-on changes to TCs and STCs (not requiring reissuance of the certificate) issued during the fiscal year for which your branch was assigned principal responsibility.

Indicator of completed work: issuance of an FAA approval document (letter, stamped 8110.3 recommending approval of design).

- Category 1A - Project completion time of 1 to 8 hours
- Category 1B - Project completion time of 9 to 40 hours
- Category 2 - Project completion time of 41 to 120 hours
- Category 3 - Project completion time of 121 to 600 hours

Field approvals (FAA Form 337), flight tests conducted* - Count the number of field approvals requiring a flight test that were completed during the fiscal year.

Indicator of completed work: the conduct of a flight test.

Field approvals (FAA Form 337), engineering design reviews completed* - Count the number of field approvals requiring design review that were completed during the fiscal year.

Indicator of completed work: the completion of a design review.

Field approvals (FAA Form 337), AFM supplements approved* - Count the number of field approvals requiring AFM supplement review that were completed during the fiscal year.

Indicator of completed work: the approval of a supplement to an aircraft flight manual.

TSO Authorizations (domestic) issued - Count the number of TSO authorizations that were issued during the fiscal year.

Indicator of completed work: the preparation of a letter approving the authorization.

* If a field approval involves any combination of flight test, design review, or AFM supplement approval activity, count each activity separately.

C. CERTIFICATIONS, APPROVALS, APPOINTMENTS

Design Approvals (Import and Domestic) (continued)

TSO design approvals (import appliance) issued - Count the number of TSO design approvals that were issued during the fiscal year.

Indicator of completed work: the preparation of a letter approving the authorization.

TSO deviations issued - Count the number of deviations to technical standard orders that were issued during the fiscal year. A request for deviation may either be granted or denied.

Indicator of completed work: the number of deviations to TSO's that are issued.

PMA design approvals (through identity) issued or denied - Count the number of PMA design approvals based on identity that were issued or denied during the fiscal year.

Indicator of completed work: a letter approving or denying the identity of design.

PMA design approvals (through test reports and computation) issued - Count the number of PMA design approvals issued based on test reports and computation that were completed during the fiscal year. Count as one PMA: a) one or more tests that substantiate the design; b) one or more parts approved from the same test(s).

Indicator of completed work: a letter approving the design(s) following completion of a test and computation procedure.

Working Procedures negotiated - Count the number of working procedures (includes those with FCAA and other entities) negotiated during the fiscal year.

Indicator of completed work: a final working procedure.

Appointment of Representatives of the Administrator

New DERs appointed or revoked - Count the number of new DERs that were appointed (includes training, indoctrination), or current DERs whose certificates were revoked for cause, during the fiscal year.

Indicator of completed work: the issuance or revocation of a certificate of authority to a DER.

New delegations (DOA, DAS) appointed - Count the number of DOAs or DASs that were appointed during the fiscal year.

Indicator of completed work: a letter of authorization to the facility.

New SFAR 36 delegations issued - Count the number of SFAR 36 delegations that were issued during the fiscal year.

Indicator of completed work: a letter of authorization to the facility.

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

AIRCRAFT CERTIFICATION SERVICE
STAFFING GUIDE FOR ENGINEERS AND FLIGHT TEST PILOTS

Organization Code: ACO-XXX.Y

Preparer: _____ Date: _____

Approved: _____ Date: _____

Continued Operational Safety

Completed Items	Time Standard	Current Quarter	
		Completed Work Prod.	Staffing Requirements (Hrs)
<u>Service Difficulties</u>			
NPRMs for ADs prepared	32	3	96
Final rule ADS prepared	32	4	128
Emergency ADS prepared	16	1	16
Exemptions to AD prepared	24		0
NPRMs for ADS reviewed	8		0
Final rule ADS reviewed	8		0
Emergency ADS reviewed	4		0
Exemptions to ADs reviewed	4		0
Alternate means of compliance with AD approved	8	13	104
Field investigations of aircraft accidents or serious incidents conducted	40	1	40
Corrective actions on service difficulties completed (non-AD)	40	6	240
Responses to NTSB recommendations prepared	60	1	60
Responses to NTSB recommendations reviewed	16		0
Responses to accident prevention recommendations prepared	24		0
Responses to accident prevention recommendations reviewed	8		0
Responses to FCAA service difficulty inquiries prepared	24	2	48
<u>Surveillance</u>			
Repair station audits supported	80		0
NASIP inspections supported	120	1	120
Aging fleet inspections conducted	24	3	72

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Completed Items	Time Standard	Current Quarter	
		Completed Work Prod.	Staffing Requirements (Hrs)
<u>Supervision and Renewal</u>			
DERs supervised	6		0
ACSEP evaluations conducted			
Category 1	32	1	32
Category 2	60	3	180
Category 3	100	1	100
<u>Other Activities</u>			
SCRs or CDRs completed	120		0
MEOT investigations completed	40		0
Technical evaluations of FOIA requests completed	8	4	32
Responses to public inquiries completed	16	3	48
Responses to Congressional inquiries completed	32		0
Responses to FCAA certification inquiries (on exported products) prepared	16	2	32
Compliance determinations for international civil airworthiness authorities completed	40	1	40
Canadian STA applications processed	16		0
Work Measures/Service Area Total:			1388

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Regulatory Policy Development

Completed Items	Time Standard	Current Quarter	Staffing
		Completed Work Prod.	Requirements (Hrs)
<u>Regulations Development</u>			
Special conditions within NPRMs prepared	70	1	70
Special conditions within final rules prepared	50		0
Special conditions within NPRMs reviewed	20		0
Special conditions within final rules reviewed	10		0
Exemptions granted or denied	55		0
Petitions for rulemaking evaluated	40		0
<u>TSOs</u>			
TSOs developed or revised	240		0
<u>Policy Development</u>			
New orders issued	215		0
Revised orders issued	145		0
Notices issued	90		0
<u>Standardization</u>			
Procedural/technical guidance letters issued	32		0
FAR-JAR harmonization meetings attended	120		0
International regulatory proposals evaluated	80		0
Bilateral negotiations concluded	120		0
Bilateral agreements prepared	32		0
Aircraft certification standardization workshops attended	32	3	96
Technical Seminar/Workshops conducted	105		0
Interdirectorate meetings (for standardization purposes) attended	12		0

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Regulatory Policy Development

Completed Items	Time Standard	Current Quarter	
		Completed Work Prod.	Staffing Requirements (Hrs)
Issue papers (certification projects) coordinated	16		0
Briefing material prepared	8		0
Responses to certification program notices (CPNs) completed	4		0
Certification program plans (CPPs) coordinated	24		0
Certification meetings attended	40		0
FCAA certification guidance meeting attended	80		0
Work Measures Total:			166
Rule-Making Projects Total:			0
Combined Service Area Total:			166

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Regulatory Policy Development (continued)**Rule-Making Projects**

Instructions: Indicate in the left hand column below the project title and control number for each rule-making project worked on by members of your staff during the quarter. All rule making and Advisory Circular projects to which your staff devoted work hours during the quarter should be listed, regardless of when they began or whether or not they were completed. Also list the FAR section(s) addressed by each project in the center column of worksheet. In the far right hand column report the total number of staff hours devoted to each project during the quarter, and indicate the approximate number of work hours remaining for those rules which were not completed. Add total staffing requirements (hours) for the quarter and enter the amount in the totals row at the bottom, and in the "Rule-Making Projects Total" row on the previous page.

Project Title and PCN	FAR Section(s)	Current Quarter	
		Staffing Requirements (Hours)	Time Remaining on Project Hours
1. N/A	-		
2.	-		
3.	-		
4.	-		
5.	-		
Page Total:		0	0

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Certifications, Approvals, Appointments (ACO)

Completed Items	Time Standard	Current Quarter	
		Completed Work Prod.	Staffing Requirements (Hrs)
<u>Design Approvals (Import and Domestic)</u>			
New Type Certificates issued			
◦ Category 1 - 1 to 40 hours	32	1	32
◦ Category 2 - 41 to 120 hours	95		0
◦ Category 3 - 121 to 600 hours	315		0
Amended Type Certificates issued			
◦ Category 1 - 1 to 40 hours	24		0
◦ Category 2 - 41 to 120 hours	85	1	85
◦ Category 3 - 121 to 600 hours	300		0
Supplemental Type Certificates issued			
◦ Category 1 - 1 to 40 hours	24	1	24
◦ Category 2 - 41 to 120 hours	85	7	595
◦ Category 3 - 121 to 600 hours	265	3	795
Amended Supplemental Type Certificates issued			
◦ Category 1 - 1 to 40 hours	24		0
◦ Category 2 - 41 to 120 hours	75	2	150
◦ Category 3 - 121 to 600 hours	220		0
Design Changes issued			
◦ Category 1A - 1 to 8 hours	4	49	196
◦ Category 1B - 9 to 40 hours	24	13	312
◦ Category 2 - 41 to 120 hours	90	6	540
◦ Category 3 - 121 to 600 hours	275	1	275
Field approvals (FAA Form 337), flight tests conducted	4		0
Field approvals (FAA Form 337), engineering design reviews completed	16	5	80
Field approvals (FAA Form 337), AFM supplements approved	4	6	24
TSO authorizations (domestic) issued	4	19	76
TSO design approvals (import appliance) issued	8		0
TSO deviations issued	32	0	0
PMA design approvals (through identity) issued or denied	8	14	112
PMA design approvals (through test reports and computation) issued	21	2	42
Working procedures negotiated	40	0	0

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Certifications, Approvals, Appointments (ACO)

Completed Items	Time Standard	Current Quarter	
		Completed Work Prod.	Staffing Requirements (Hrs)
<u>Appointment of Representatives of the Administrator</u>			
New DERs appointed or revoked	12	4	48
New delegations (DOA, DAS) appoi	120		0
New SFAR 36 delegations issued	80	1	80
Work Measure Total:			3466
Certification Projects (600 + hour) Total:			1050
Combined Service Area Total:			4516

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Certifications, Approvals, Appointments (continued)

Certification Projects (600+ Hours)

Instructions: Indicate below the title and project control number for each 600+ hour certification project worked on by members of your staff during the quarter in the five design approval categories listed. All 600+ hour certification projects to which your staff devoted work hours during the quarter should be reported, regardless of when they began or whether or not they were completed. In the right hand column list the approximate number of work hours remaining for those projects which were not completed. Add the total staffing requirements (hours) for the quarter and enter the amount in the totals row at the bottom, and in the "Certification Projects (600+ hours) Total" row on the previous page.

Service Areas & Products	PCN	Current Quarter	
		Staffing Requirements (Hours)	Time Remaining on Project (Hours)
<u>Design Approvals</u>			
Type Certificates			
1. SA 227	1466	250	3620
Amended Type Certificates			
1. Lear 55	1205	200	8800
Supplemental Type Certificates			
1. Beech 200	1094	600	600
Amended Supplemental Type Certificates			
Design Changes			
Page Total:		1050	13020

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Other Direct Activities

Instructions: This reporting category is designed to capture direct work activities which do not occur on a regular recurring basis and for which no specific time standards have been developed, and work items completed by an organization not normally responsible for that particular product or service. An example of the latter would be a project delegated from one organizational level to another, such as TSO development done by an ACO on behalf of Headquarters. Examples of the former "one-time" or special projects would include support to air shows, industry conventions, designee conferences, SAE/FAA Committees, or development of a technical paper for an ASME symposium. Also, direct work activities reported in this category, which repetitively appear over time are intended to form the basis, for Staffing Standards Review Committee development of new or revised work measures.

In the left hand column provide a brief description of each other direct work project to which your staff devoted work hours during the quarter. In the center column list the project title and control number for the activity, and indicate the total number of staff hours spent on each project during the quarter in the right hand column (minimum 80 hours). For items delegated to your organization which are included in the staffing standard, use the specific time standard figure associated with that work measure. For those activities which were not completed, indicate in the right hand column the approximate number of work hour remaining on the project. Add the total staffing requirements (hours) requirements (hours) for the quarter and enter the amount in the totals row at the bottom of the page.

Description	PCN	Current Quarter	
		Staffing Requirements (Hours)	Time Remaining on Project (Hours)
1. Oshkosh Airshow	1432	40	140
2. Team Member, Aging Commuter Aircraft Issues	1513	20	380
Category Total:		60	520

SAMPLE WORK PRODUCTS AND STAFF HOURS REPORT

Total Direct Work Hours

Instructions: Enter the combined service area totals for each of the four categories of direct work as indicated in the chart below, and add the figures to obtain your organization's total direct workload for the quarter. In the second section of the worksheet indicate the number of certification engineers and flight test pilots on your staff during the quarter. Determine the average by dividing the total number of weeks worked by all engineers and flight test pilots by 13, the number of work weeks in a full quarter. List only the number of employees in these occupations performing substantive, non-supervisory duties; do not include administrative support staff or managers in these figures.

<u>Public Service Area</u>	<u>Current Quarter</u>
Continued Operational Safety	1388
Regulatory Policy Development	166
Certifications, Approvals, Appointments	4516
Other Direct Work	60
 QUARTERLY TOTAL:	 6130

Average On-Board Staffing

Certification Engineers	11
Flight Test Pilots	3

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

**AIRCRAFT CERTIFICATION SERVICE
STAFFING GUIDE FOR ENGINEERS AND FLIGHT TEST PILOTS**

Organization Code: ACO-XXX.Y

Preparer: _____ Date: _____

Approved: _____ Date: _____

Continued Operational Safety

Completed Items	Time Standard	Current Year		Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
		Completed Work Prod.	Staffing	Completed Work Prod.	Staffing	Completed Work Prod.	Staffing	Completed Work Prod.	Staffing
			Requirements (Hrs)		Requirements (Hrs)		Requirements (Hrs)		Requirements (Hrs)
<u>Service Difficulties</u>									
NPRMs for ADs prepared	32	12	384	15	480	15	480	15	480
Final rule ADs prepared	32	16	512	18	576	20	640	22	704
Emergency ADs prepared	16	3	48	3	48	3	48	2	32
Exemptions to AD prepared	24		0		0		0		0
NPRMs for ADs reviewed	8		0		0		0		0
Final rule ADs reviewed	8		0		0		0		0
Emergency ADs reviewed	4		0		0		0		0
Exemptions to ADs reviewed	4		0		0		0		0
Alternate means of compliance with AD approved	8	46	368	50	400	50	400	50	400
Field investigations of aircraft accidents or serious incidents conducted	40	7	280	7	280	6	240	6	240
Corrective actions on service difficulties completed (non-AD)	40	20	800	22	880	24	960	26	1040
Responses to NTSB recommendations prepared	60	5	300	5	300	5	300	6	360
Responses to NTSB recommendations reviewed	16		0		0		0		0
Responses to accident prevention recommendations prepared	24	4	96	4	96	5	120	5	120
Responses to accident prevention recommendations reviewed	8		0		0		0		0
Responses to FCAA service difficulty inquiries prepared	24	6	144	10	240	10	240	12	288

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Completed Items	Current Year			Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
	Time Standard	Completed Work Prod.	Staffing	Completed Work Prod.	Staffing	Completed Work Prod.	Staffing	Completed Work Prod.	Staffing
			Requirements (Hrs)		Requirements (Hrs)		Requirements (Hrs)		Requirements (Hrs)
<u>Surveillance</u>									
Repair station audits supported	80	2	160	2	160	3	240	2	160
NASIP inspections supported	120	3	360	4	480	5	600	7	840
Aging fleet inspections conducted	24	7	168	10	240	14	336	17	408
<u>Supervision and Renewal</u>									
DERs supervised	2	97	194	108	216	120	240	132	264
ACSEP evaluations conducted									
Category 1	32	6	192	10	320	12	384	15	480
Category 2	60	17	1020	22	1320	25	1500	30	1800
Category 3	100	3	300	10	1000	12	1200	20	2000
<u>Other Activities</u>									
SCRs or CDRs completed	120	3	360	3	360	3	360	3	360
MEOT investigations completed	40		0	1	40		0	1	40
Technical evaluations of FOIA requests completed	8	22	176	6	48	6	48	8	64
Responses to public inquiries completed	16	13	208	12	192	14	224	12	192
Responses to Congressional inquiries completed	32	2	64	2	64	2	64	2	64
Responses to FCAA Certification inquiries (on exported products) prepared	16	9	144	12	192	15	240	18	288
Compliance determinations for international civil airworthiness authorities completed	40	3	120	4	160	7	280	7	280
Canadian STA applications processed	16	2	32		0	1	16		0
Continued Operational Safety Service Area Total:			6430		8092		9160		10904

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Regulatory Policy Development

Completed Items	Time Standard	Current Year		Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
		Completed Work Prod.	Staffing	Completed Work Prod.	Staffing	Completed Work Prod.	Staffing	Completed Work Prod.	Staffing
			Requirements (Hrs)		Requirements (Hrs)		Requirements (Hrs)		Requirements (Hrs)
<u>Regulations Development</u>									
Special conditions within NPRMs prepared	70	3	210	1	70	2	140	1	70
Special conditions within final rules prepared	50	2	100		0	1	50		0
Special conditions within NPRMs reviewed	20		0		0		0		0
Special conditions within final rules reviewed	10		0		0		0		0
Exemptions granted or denied	55		0		0		0		0
Petitions for rulemaking evaluated	40		0		0		0		0
<u>TSOs</u>									
TSOs developed or revised	240		0		0		0		0
<u>Policy Development</u>									
New AC sections issued (FAR Specific)	24		0		0		0		0
New ACs issued (topical)	190		0		0		0		0
Revised AC sections issued (FAR specific)	16		0		0		0		0
Revised ACs issued (topical)	150		0		0		0		0
New orders issued	215		0		0		0		0
Revised orders issued	145		0		0		0		0
Notices issued	90		0		0		0		0
<u>Harmonization</u>									
Procedural/technical guidance letters issued	32		0		0		0		0
FAR-JAR harmonization meetings attended	120		0		0		0		0

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Completed Items	Time Standard	Current Year		Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
		Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)
<u>Standardization</u>									
International regulatory proposals evaluated	80		0		0		0		0
Bilateral negotiations concluded	120		0		0		0		0
Bilateral agreements prepared	32		0		0		0		0
Aircraft Certification Standardiza- tion workshops attended	32	9	288	11	352	13	416	13	416
Issue papers (certification projects) coordinated	16		0		0		0		0
Responses to certification program notices (CPNs) completed	4		0		0		0		0
Certification program plans (CPPs) coordinated	24		0		0		0		0
Certification meetings attended	40		0		0		0		0
FCAA certification guidance meetings attended	80		0		0		0		0
Work Measures Total:			598		422		606		486
Rule-Making Projects Total:			0		0		0		0
Regulatory Policy Development Service Area Total:			598		422		606		486

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Regulatory Policy Development (continued)

Rule-Making Projects

Instructions: Indicate in the left hand column below the project title and control number for each rule-making project worked on by members of your staff during the fiscal year. All rule-making projects to which your staff devoted work hours during the fiscal year should be listed, regardless of when they began or whether or not they were completed. Also list the FAR section(s) addressed by each project in the next column of the worksheet. In the third column report the hours devoted to each project during the fiscal year, and indicate the approximate number of work hours remaining for those rules which were not completed. Indicate the expected distribution of these remaining hours over the next three fiscal years. Add the total staffing requirements (hours) for each fiscal year and enter in the totals row at the bottom, and in the "Rule-Making Projects Total" row on the previous page.

Project Title and PCN	FAR ection(s)	Current Year		Staffing Forecast FY		Staffing Forecast FY		Staffing Forecast FY	
		Staffing Requirement (Hours)	Time Remaining on Project Hours	Staffing Requirement (Hours)	Time Remaining on Project Hours	Staffing Requirement (Hours)	Time Remaining on Project Hours	Staffing Requirement (Hours)	Time Remaining on Project Hours
1. N/A									
2.									
3.									
4.									
5.									
Rule-Making Projects Total:		0	0	0	0	0	0	0	0

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Certifications, Approvals, Appointments (ACO)

Completed Items	Time Standard	Current Year		Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
		Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)
<u>Design Approvals (Import and Domestic)</u>									
New Type Certificates issued									
◦ Category 1 - 1 to 40 hours	32	2	64	1	32	1	32	1	32
◦ Category 2 - 41 to 120 hours	95		0	1	95	2	190	2	190
◦ Category 3 - 121 to 600 hours	315	1	315	3	945	1	315	1	315
Amended Type Certificates issued									
◦ Category 1 - 1 to 40 hours	24	1	24	1	24	2	48	2	48
◦ Category 2 - 41 to 120 hours	85	1	85	1	85	1	85	1	85
◦ Category 3 - 121 to 600 hours	300		0	1	300		0	1	300
Supplemental Type Certificates issued									
◦ Category 1 - 1 to 40 hours	24	4	96	5	120	7	168	8	192
◦ Category 2 - 41 to 120 hours	85	22	1870	20	1700	22	1870	25	2125
◦ Category 3 - 121 to 600 hours	265	9	2385	15	3975	12	3180	12	3180
Amended Supplemental Type Certificates issued									
◦ Category 1 - 1 to 40 hours	24	1	24		0	1	24	1	24
◦ Category 2 - 41 to 120 hours	75	7	525	7	525	7	525	7	525
◦ Category 3 - 121 to 600 hours	220	4	880	2	440	3	660	3	660
Design Changes issued									
◦ Category 1A - 1 to 8 hours	4	196	784	200	800	205	820	190	760
◦ Category 1B - 9 to 40 hours	24	44	1056	45	1080	50	1200	40	960
◦ Category 2 - 41 to 120 hours	90	19	1710	20	1800	20	1800	15	1350
◦ Category 3 - 121 to 600 hours	275	8	2200	10	2750	10	2750	5	1375
Field approvals (FAA Form 337), flight tests conducted	4	3	12	3	12	3	12	4	16
Field approvals (FAA Form 337), engineering design reviews completed	16	18	288	15	240	15	240	18	288
Field approvals (FAA Form 337), AFM supplements approved	4	15	60	12	48	12	48	15	60

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Completed Items	Time Standard	Current Year		Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
		Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)	Completed Work Prod.	Staffing Requirements (Hrs)
<u>Design Approvals (continued)</u>									
TSO authorizations (domestic) issued	4	73	292	80	320	80	320	75	300
TSO design approvals (import appliance) issued	8	3	24	5	40	5	40	5	40
TSO deviations issued	32	0	0	0	0	0	0	0	0
PMA design approvals (through identity) issued or denied	8	50	400	58	464	58	464	50	400
PMA design approvals (through test reports and computation) issued	40	8	320	4	160	6	240	4	160
Working procedures negotiated	40	1	40	2	80	0	0	1	40
<u>Appointment of Representatives of the Administrator</u>									
New DERs appointed or revoked	12	21	252	25	300	30	360	35	420
New delegations (DOA,DAS) appointe	120		0		0		0		0
New SFAR 36 delegations issued	80	2	160	1	80	1	80	1	80
Work Measure Total:			13866		16415		15471		13925
Certification Projects (600+ hour) Total:			3340		4300		6400		2110
Certifications, Approvals, Appointments Service Area Total:			17206		20715		21871		16035

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Certifications, Approvals, Appointments (continued)

Certification Projects (600+ Hours)

Instructions: Indicate below the title and project control number for each 600+ hour certification project worked on by members of your staff during the fiscal year in the five design approval categories listed. All 600+ hour certification projects to which your staff devoted work hours during the fiscal year should be reported regardless of when the began or whether or not they were completed. In the third column report the total number of staff hours devoted to each project during the fiscal year, and indicate the approximate number of work hours remaining for those projects which were not completed. Indicate the expected distribution of these remaining hours over the next three fiscal years. Add the total staffing requirements (hours) for each fiscal year and enter the amount in the totals row at the bottom, and in the "Certification Projects (600+ hours) Totals" row on the previous page.

Service Areas & Products	PCN	Current Year		Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
		Staffing Requirement (Hours)	Time Remaining on Project (Hours)	Staffing Requirement (Hours)	Time Remaining on Project (Hours)	Staffing Requirement (Hours)	Time Remaining on Project (Hours)	Staffing Requirement (Hours)	Time Remaining on Project (Hours)
<u>Design Approvals</u>									
Type Certificates									
1. SA 227	1466	960	2910	1600	1310	1100	210	210	0
Amended Type Certificates									
1. Cessna 560	1233	330	2500	700	1800	1800	0		
2. Lear 55	1205	850	8150	2000	6150	3500	2650	1900	750
Supplemental Type Certificates									
1. Beech 200	1094	1200	0						
Amended Supplemental Type Certificates									
Design Changes									
Certification Projects (600+ hour) Total:		3340	13560	4300	9260	6400	2860	2110	750

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Other Direct Activities

Instructions: This reporting category is designed to capture direct work activities which do not occur on a regular or recurring basis and for which no specific time standards have been developed, and work items completed by an organization not normally responsible for that particular product or service. An example of the latter would be a project delegated from one organizational level to another, such as TSO development done by an ACO on behalf of Headquarters. Examples of the former "one-time" or special projects would include support to air shows, industry conventions, designee conferences, SAE/FAA committees, or development of a technical paper for an ASME symposium. Also, direct work activities reported in this category, which repetitively appear over time are intended to form the basis for Staffing Standards Review Committee development of new or revised work measures.

In the left hand column below provide a brief description of each other direct work project to which your staff devoted work hours during the fiscal year. Next list the project title and control number for the activity, and indicate the total number of staff hours spent on each project during the fiscal year (minimum 80 hours). For items delegated to your organization which are included in the staffing guide, use the specific time standard figure associated with that work measure. For those activities which were not completed during the fiscal year, indicate the approximate number of work hours remaining on the project. Indicate the expected distribution of these remaining hours over the next three fiscal years. Add the total staffing requirements (hours) for each fiscal year and enter the amount in the totals row at the bottom of the page.

Description	PCN	Current Year		Staffing Forecast FY 92		Staffing Forecast FY 93		Staffing Forecast FY 94	
		Staffing	Time	Staffing	Time	Staffing	Time	Staffing	Time
		Requirement (Hours)	Remaining on Project (Hours)	Requirement (Hours)	Remaining on Project (Hours)	Requirement (Hours)	Remaining on Project (Hours)	Requirement (Hours)	Remaining on Project (Hours)
1. Oshkosh Airshow	1432	180	0						
2. Revised AC - fuel system lightning	1087	110	40	40	0				
3. Team Member, Aging Commuter Aircraft Issues	1513	80	320	160	160	160	0		
Other Direct Activities Total:		370	360	200	160	160	0	0	0

FIGURE 2. SAMPLE STAFFING REQUIREMENTS REPORT

Total Direct Work Hours

Instructions: Enter the combined service area totals for each of the four categories of direct work as indicated below, and add the figures to obtain the fiscal year total direct work hours for your organization. The indirect allowance will be factored in later when your organizational totals are combined with others at the ACO, Directorate, or Division level. In the second section of the worksheet indicate the average number of certification engineers and flight test pilots on your staff during the fiscal year. Determine the average by dividing the total number of weeks worked by all engineers and flight test pilots - e.g., 52 for a full year employee, 26 for a half year employee - by 52. List only the number of employees in these occupations performing substantive, non-supervisory duties; do not include administrative support staff or managers in these figures.

Public Service Area	Current Year	Forecast FY 92	Forecast FY 93	Forecast FY 94
Continued Operational Safety	6430	8092	9160	10904
Regulatory Policy Development	598	422	606	486
Certifications, Approvals, Appointments	17206	20715	21871	16035
Other Direct Work	370	200	160	0
FISCAL YEAR TOTAL:	24604	29429		

Average On-Board FY Staffing

Certification Engineers	12			
Flight Test Pilots	3			
			31797	27425

FIGURE 3. INDIRECT WORK ALLOWANCE

Category	Definition	% Allowance
Assistance	<p>Support to other organizations in accomplishing their missions:</p> <p>Support to manufacturing inspectors (PC, APIS boards, special airworthiness certificates, enforcement actions)</p> <p>Support to Flight Standards (regulatory project teams, investigations, approval of process specifications for repair stations, compliance findings under Part 121)</p> <p>Support to regional Counsel on litigation activities</p> <p>Research and Development project monitoring</p> <p>Update of DOA, DAS, SFAR-36 staff qualifications and handbooks</p>	5.0
Travel	Official travel during duty hours	3.0
ACRP Support	General technical research (seminars, library time, journal review); participation in professional society programs, trend analysis of service difficulty data; presentations; DER newsletters; informal inquiries; Project SMART	5.0
Leave	Leave of any kind(annual, sick, leave without pay, military, court, administrative), including holidays	15.0
Training	Non-technical and technical training (except managers' training), including technical workshops	5.0
TOTAL ALLOWANCE:		33.0

